Models of the Universe -- Spring 2003

Talking points for class on 19 April 2003

As the American philosopher Will Rogers said, the problem "is not what we don't know, it's what we know that ain't so." A historical example is the unquestioned belief in uniform, circular motion before Kepler. Almost as important as Kepler's discovery of his laws of planetary motion was his realization that the motions were **NOT** uniform and circular.

For real progress to be made in science it is often necessary to realize that something that had been held without question is, in fact, wrong. Perhaps this is true outside of science as well.

1. Think of other historical examples where progress required overturning something that had been held as unquestioned truth. The example need not be from the history of science.

2. Perhaps our present-day core beliefs inside and outside of science are correct, or perhaps 200 years from now people will look back and wonder how we were ever so naïve as to believe something we now do not question. Think of some core belief most of us have that you think 200 years from now people will realize is hogwash.

It is hard to overstate the historical importance of the trial of Galileo. Here are some topics for class discussion.

1. Please read the selection from Galileo's Dialogues posted on the website. We will discuss the writing style, content, and approach.

2. Please think of either a defense strategy or a prosecution strategy for the trial of Galileo.